



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,526	09/23/2004	Felicia Lindau	04-0047	5525
30550 7590 11/14/2007 BILL & MARY LOU INC. 101 LOMBARD STREET #510 W SAN FRANCISCO, CA 94111				
			EXAMINER ABEBE, DANIEL DEMELASH	
			ART UNIT 2626	PAPER NUMBER
			MAIL DATE 11/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/711,526

Applicant(s)

LINDAU ET AL.

Examiner

Daniel D. Abebe

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (2005/0190,199) in view of Chen (7,215,782).

As to claim 1, Brown teaches a system for providing an audience with a visual presentation of sound comprising:

A 'live music signal reception means including an analog to digital converter with gain, where a digital signal comprising multiple musical notes is generated;

A processor for performing transformation of the digital signal to determine the notes, including time shifting of the identified musical notes; and

A visual representation means with a digital to analog converter and volume/gain controller for presenting the notes visually to the audience in synch with the sound (Par.0025, 0058-0051; Par.0119).

More particularly Brown teaches

An analog-to-digital converter processes an analog sound wave to provide a digital sound wave. Component frequencies of the digital sound waves are identified, filtered and translated to their corresponding musical note and volume. As the original digital sound wave is sent through a digital-to-analog converter and output to an audio

Art Unit: 2626

device, the identified musical notes are synchronously output to a display device. User-specified parameters, adjustable at any time before, during or after the music-playing process, control frequency filtering, the graphic display of the identified musical notes and the graphical background on which the musical notes are displayed (abstract).

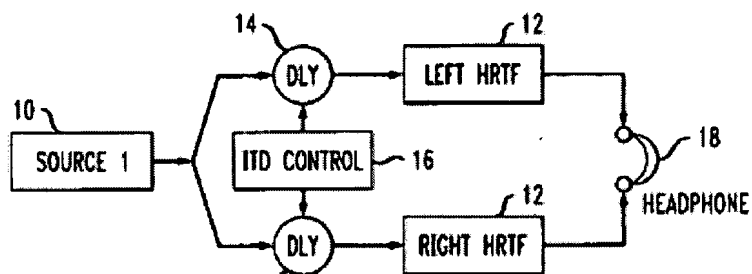
It is noted that Brown doesn't explicitly teach where multiple channels are generated. Chen however teaches a computer based system for providing virtual acoustic sound, comprising;

Receiving an acoustic signal;

processing the acoustic source signal to generate multiple channel acoustic signal including attenuating and scaling the signal; and

Providing to an output for audience presentation (Col.5, lines 5-60).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the two teachings for the purpose of improving the presentation.



As to claims 2-3, Brown teaches where If the music source is a recording of a sound wave, the original recorded sound wave is synchronously output to an audio device as the musical notes are graphically displayed on a display device. (Par.0023).

As to claim 4, Brown teaches detecting the musical beat (Par 0087).

As to claim 5, Brown teaches where the transformation consist plurality of human hearing model (Par.0058).

As to claims 6-7, Brown teaches where the processor is application specific circuit comprising instructions (Fig.1).

Claims 8-19 are analogous to the claims above and are rejected by Brown in view of Chen for the foregoing reasons.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Abebe whose telephone number is 571-272-7615. The examiner can normally be reached on monday-friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

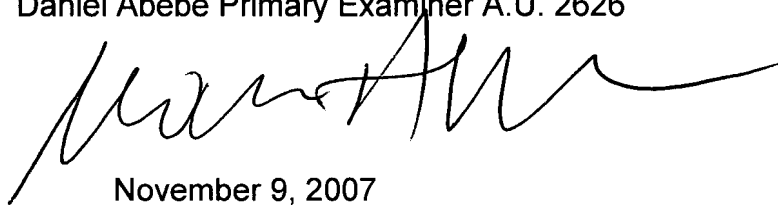
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/711,526

Page 5

Art Unit: 2626

Daniel Abebe Primary Examiner A.U. 2626

A handwritten signature in black ink, appearing to read 'Daniel Abebe', with a long horizontal flourish extending to the right.

November 9, 2007